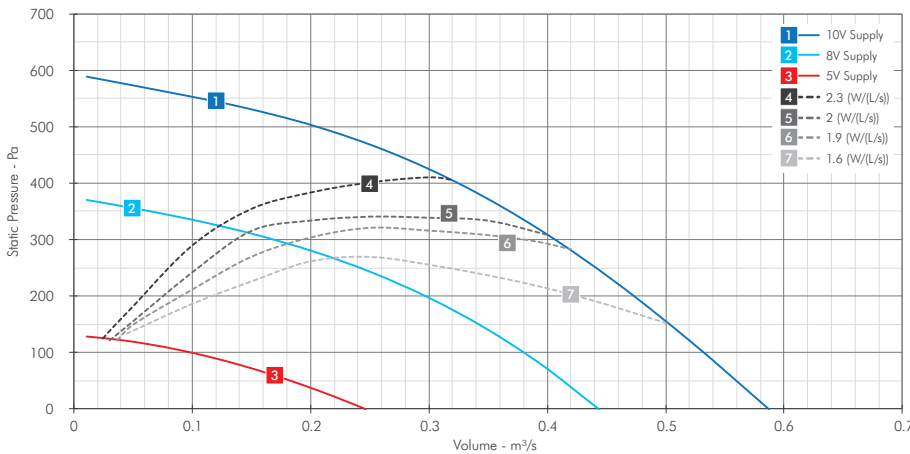


PREMA540

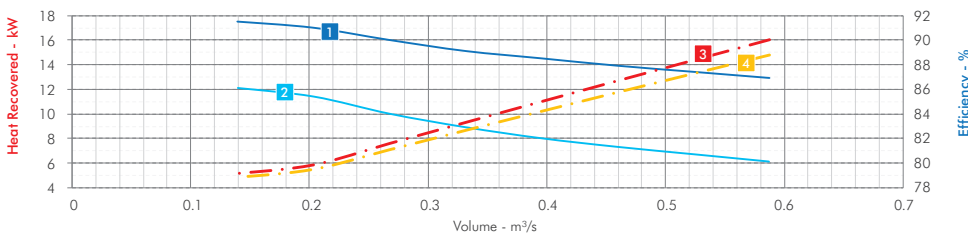
The PREMA540 unit is optimised for any commercial building services application covering an airflow envelope of 0.145 – 0.546 m³/s at 75Pa ESP (low pressure duct systems). Overall unit SFP calculated with ISO ePM₁ 55% (F7) / ISO ePM₁₀ 55% (M5) filters under clean filter conditions.



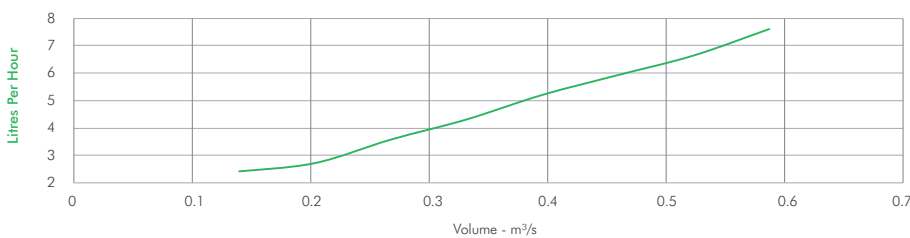
Airflow Performance Curve



Heat Exchanger Efficiency & Energy Recovery



Condensate Rate



Key Features

- Heat / Coolth Recovery
- Dual Condensate Tray
- Low energy consumption and quiet EC fans
- Counterflow heat exchanger offering high thermal energy recovery
- 100% motorised bypass damper
- Fine particulate filters fitted as standard
- ErP 2018 compliant
- Demand control options with BMS, CO₂ or constant pressure sensors
- Airflow balancing allows individual fan control and ensures a balanced supply and extract

Dry performance based on EN 308

Wet performance based on -5°C supply 95% RH, +21°C extract 50% RH

Wet Performance based on -5°C supply 95% RH, +21°C extract 50% RH

Performance Data

Control Voltage	Speed r/min	Airflow SFP	Airflow m ³ /s @ Static Pressure Pa												Input kW	Peak Amps
			0	25	50	75	100	150	200	250	300	350	400	500		
10V	2016	m ³ / s	0.587	0.573	0.560	0.546	0.532	0.503	0.473	0.441	0.407	0.368	0.325	0.206	0.804	3.55
		W / (L/s)	1.37	1.40	1.43	1.46	1.50	1.58	1.68	1.78	1.90	2.04	2.19	2.82		
8V	1599	m ³ / s	0.443	0.428	0.413	0.397	0.380	0.342	0.297	0.241	0.168	0.064	-	-	0.417	1.85
		W / (L/s)	0.94	0.97	1.01	1.04	1.09	1.19	1.33	1.52	1.90	3.69	-	-		
5V	955	m ³ / s	0.246	0.216	0.183	0.145	0.098	-	-	-	-	-	-	-	0.109	0.55
		W / (L/s)	0.44	0.50	0.57	0.68	0.89	-	-	-	-	-	-	-		

Specific Fan Power figures (W / (L/s)) are total for both fans running under clean filter conditions (ref. the building regulations).

Data provided is at standard air density of 1.2 kg/m³. Air Performance: ISO 5801:2007.

Refer to Air Design Ecodesign document for data in accordance with ErP 1253/2014 of the European Parliament. Product category is NRVU:BVU. Measurement category used to determine energy efficiency: D.

A variable speed drive is integrated within the fan.

Peak Amps @ 230V / 1PH / 50Hz.

Sound Data

Control Voltage	Speed r/min	Location	Sound Power Level dBW @ Octave Band Hz									dBA @ 3m
			63 Hz	125 Hz	250 Hz	500 Hz	1k Hz	2k Hz	4k Hz	8k Hz	Total dB	
10V	2016	Intake (T21)	77	76	76	69	62	57	55	51	81	51
		Supply (T22)	71	62	55	56	49	40	29	25	72	36
		Extract (T11)	79	79	77	71	63	58	56	51	84	52
		Exhaust (T12)	74	65	52	51	47	37	29	26	75	34
		Break Out	67	63	66	52	37	32	32	22	70	38
8V	1599	Intake (T21)	72	75	67	63	55	51	48	46	77	44
		Supply (T22)	66	57	49	46	43	34	26	23	67	28
		Extract (T11)	74	76	68	64	56	52	49	46	79	45
		Exhaust (T12)	67	61	47	44	41	32	26	24	68	28
		Break Out	63	61	58	43	31	27	24	19	66	31
5V	955	Intake (T21)	70	66	56	49	43	36	34	29	72	33
		Supply (T22)	58	52	37	33	30	24	22	20	59	19
		Extract (T11)	71	67	57	49	43	36	33	30	73	34
		Exhaust (T12)	59	53	34	30	28	23	21	19	60	19
		Break Out	55	50	47	29	19	15	16	16	57	20

The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20μPa and is presented for comparative purposes only. Tests and preparation of the sound data have been carried out in accordance with BS 848-2:1985 (ducted) and **independently tested** to ISO 3741:2010 (breakout).

The Sound Power Level Spectra are in dB re-1pW.

Dimensional Data

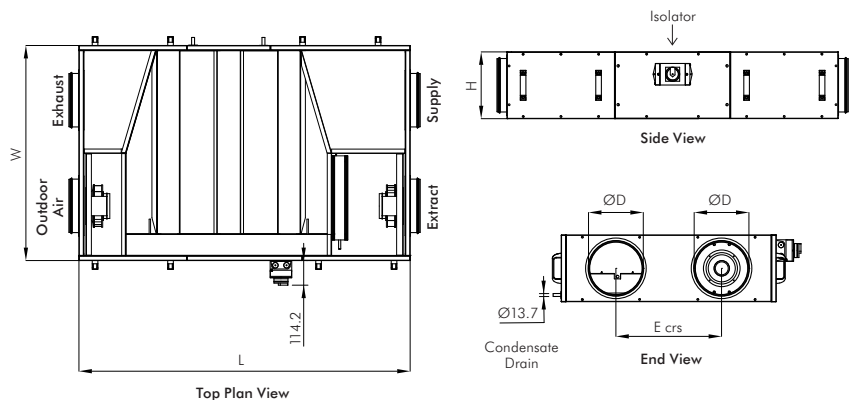
Unit Size	L	W	H*	D	E	Weight kg
PREMA540	2066	1496	474	355	750	241

All dimensions are expressed in mm.

*Overall height includes unit mounted condensate drain tray.

Ordering Stock Codes

Product Stock Code	Product Description
7835824-540	PREMA Size 540
7835824-540CP	PREMA Size 540 Constant Pressure Control

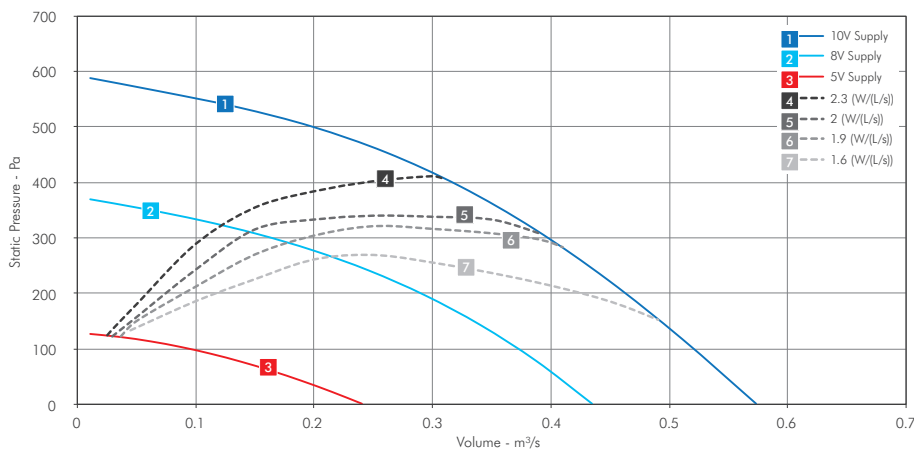


PREMA540+

The PREMA540+ have evolved to deliver comfort ventilation with added heating capabilities and a dedicated Kinairtico Mini controller for superior demand controlled ventilation and BMS connectivity.



Airflow Performance Curve - Water Heater Version



+Features

In addition to the features listed for PREMA540, the PREMA540+ includes:

- **Heating** (Electric or Hot Water)
- **Kinairtico0 / Kinairtico Mini**

Heating Loads – Performance Table

+Heating	Electric Heater Battery (kW)*	Hot Water Coil (kW)	Fluid Data		
			Internal Volume (L)	Flow Rate (L/s)	Flow / Return temps. (°C)
PREMA540+	2.0	8.75	0.67	0.11	80/60

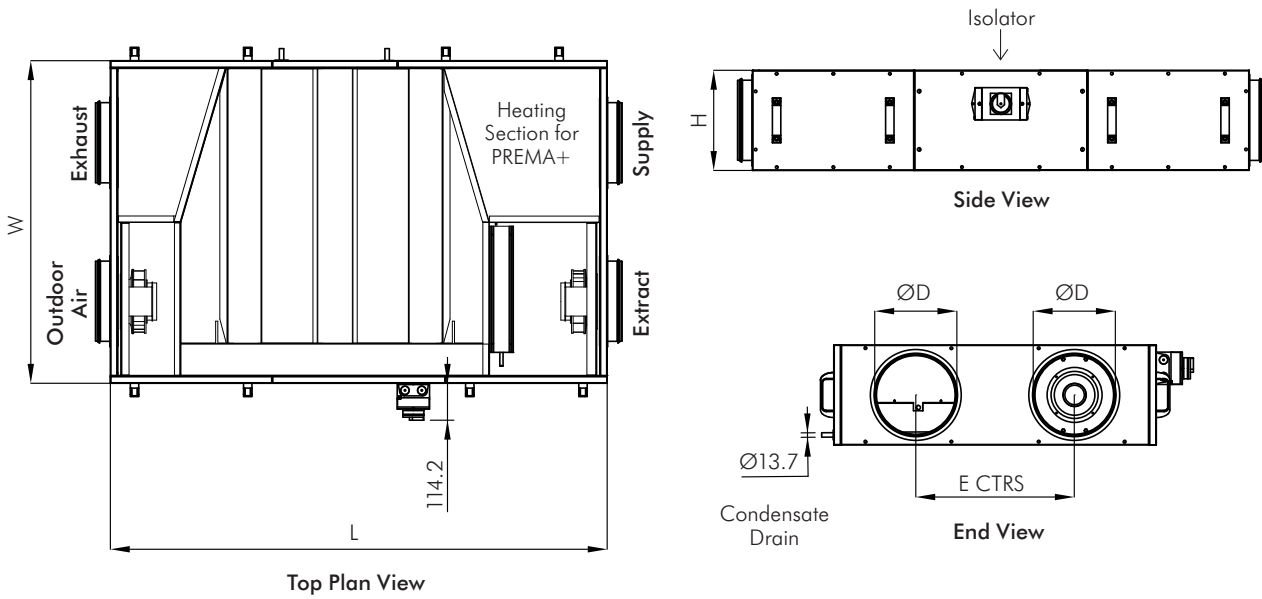
*1phase modulating heater battery.

Ordering Stock Codes

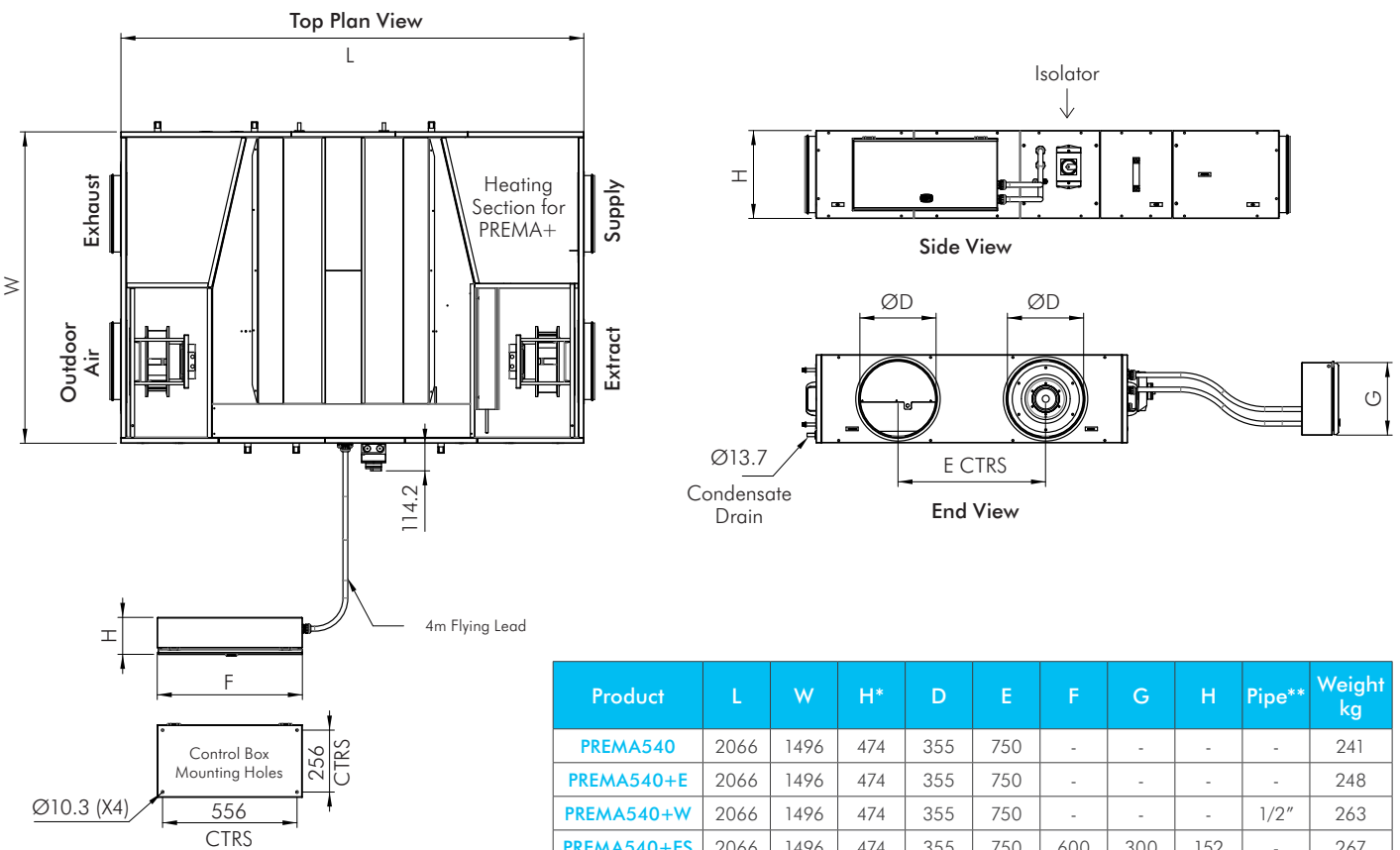
Product Stock Code	Product	Product Description
7835824-540E	PREMA540+E	Electric heater version (Kinairtico0 control)
7835824-540ES	PREMA540+ES	Electric heater version (Kinairtico Mini control)
7835824-540W	PREMA540+W	Water heater version (Kinairtico0 control)
7835824-540WS	PREMA540+WS	Water heater version (Kinairtico Mini control)
7835824-540ECP	PREMA540+ECP	Electric heater version (Kinairtico0 control) constant pressure control
7835824-540ESCP	PREMA540+ESCP	Electric heater version (Kinairtico Mini control) constant pressure control
7835824-540WCP	PREMA540+WCP	Water heater version (Kinairtico0 control) constant pressure control
7835824-540WSCP	PREMA540+WSCP	Water heater version (Kinairtico Mini control) constant pressure control

Dimensional Data

PREMA540, PREMA540+E & PREMA540+W



PREMA540+ES & PREMA540+WS



Product	L	W	H*	D	E	F	G	H	Pipe**	Weight kg
PREMA540	2066	1496	474	355	750	-	-	-	-	241
PREMA540+E	2066	1496	474	355	750	-	-	-	-	248
PREMA540+W	2066	1496	474	355	750	-	-	-	1/2"	263
PREMA540+ES	2066	1496	474	355	750	600	300	152	-	267
PREMA540+WS	2066	1496	474	355	750	600	300	152	1/2"	283

All dimensions are expressed in mm.

*Overall height includes unit mounted condensate drain tray.

**LPHW Coil Header dimension.